

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 03/13870

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G10K11/168

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G10K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98/18656 A (RIETER AUTOMOTIVE INT AG ; ALTS THORSTEN (DE)) 7 May 1998 (1998-05-07) cited in the application claim 1 page 6, line 5 - line 37 figure 4	1-11
X	WO 02/094616 A (RIETER TECHNOLOGIES AG ; O'REGAN DESMOND (GB); KHAN HAMEED S (US); FIS) 28 November 2002 (2002-11-28) claims 1,3-5 page 3, line 11 - line 22 page 4, line 1 - line 6 tables 1,2	1-6,8-11
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

31 March 2004

Date of mailing of the international search report

06/04/2004

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>WO 99/35007 A (RIETER AUTOMOTIVE INT AG ; ALTS THORSTEN (DE)) 15 July 1999 (1999-07-15) claims 1-3,16,17 page 6, line 1 - page 7, line 19 -----</p>	1

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1-11, in part

Present claim 1 relates to an "ultralight trim composite, comprising a first acoustically effective layer and a second underlay layer, characterised in that, for the balancing of the absorption and sound transmission behaviour of the composite, the first acoustically effective layer has an air flow resistance R between 500 and 10.000 Ns/m^3 , and has an area mass between 200 and 3.000 g/m^2 ; the second underlay layer has a very low compression force deflection modulus, i.e. a stiffness value S_d in the range between 100 and 100.000 Pa ; and, in addition, comprises an acoustically transparent, very thin and light weight film between the second underlay layer and the first acoustically effective layer, which film interacts with this underlay layer in the manner of an acoustic foil absorber".

In view of this wording, several objections under Art.5 and 6 PCT arise to such an extent that they render a meaningful search of said claim 1 impossible. The reasons are the following:

(i) Present claim 1 does not refer to the materials constituting the trim composite, but instead is only defined by ranges of values for certain properties or test results. In fact, it relates to a product defined only by reference to desirable characteristics or properties such as the air flow resistance and area mass of the first layer and the stiffness value of the second underlay layer. Thus, it covers all products having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT for only a very limited number of such products; at present, the features responsible for the desired properties, i.e. the essential features, do not appear in said claim. Thus, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible.

(ii) Besides, the use of the compression force deflection modulus parameter in the present context is considered to lead to a lack of clarity within the meaning of Article 6 PCT. It is impossible to compare the parameter the applicant has chosen to employ with what is set out in the prior art.

(iii) Independent of the above reasoning, claim 1 also lacks clarity (Article 6 PCT) in that an attempt is made to define the product by reference to several results to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible.

(iv) At last, claim 1 defines the trim laminate using many vague terms and expressions, such as "ultralight", "acoustically effective", "very low", "very thin", "light weight", "interacts with this underlay in the manner of an acoustic foil absorber", by reference to a desirable characteristic or property. These terms have either a relative or a very broad meaning, and can in any case not be used to distinguish the present invention over the prior art. Thus, they lead to a lack of clarity within the meaning of Art.6 PCT.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the trim composite comprising a first layer made from a fibrous layer, a second foam underlay, and an acoustically transparent film made from PVOH, PET, EVA, PE, PP foils or a PE/PA dual foil as disclosed in the description on page 2, lines 23-25, and page 3, lines 20-25.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

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Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 1-11, in part
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International No

PCT/EP 03/13870

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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			WO 9935007 A1	15-07-1999
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			EP 1045775 A1	25-10-2000
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